H S. John

Rhodora

JOURNAL OF THE

NEW ENGLAND BOTANICAL CLUB

Conducted and published for the Club, by

BENJAMIN LINCOLN ROBINSON, Editor-in-Chief

MERRITT LYNDON FERNALD HOLLIS WEBSTER CARROLL WILLIAM DODGE

Associate Editors

WILLIAM PENN RICH, Publication Committee

tern New York. H. K. Soenson	. 221
concluded.) Edited by I. F. Lewis	222
eric Names. K. K. Mackenzie	229
rm of Ilex myrtifolia. S. F. Blake	231
	232
	233
-	tern New York. H. K. Svenson concluded.) Edited by I. F. Lewis eric Names. K. K. Mackenzie rm of Ilex myrtifolia. S. F. Blake

Boston, Mass.

300 Massachusetts Ave.

Providence, R. J.

Preston and Rounds Co.

RHODORA.—A monthly journal of botany, devoted primarily to the flora of New England. Price, \$2.00 per year, postpaid (domestic and foreign); single copies (if available) 20 cents. Volumes 1-8 or single numbers from them can be supplied at somewhat advanced prices which will be furnished on application. Notes and short scientific papers, relating directly or indirectly to the plants of the northeastern states, will be gladly received and published to the extent that the limited space of the journal permits. Forms will be closed five weeks in advance of publication. Authors (of more than one page of print) will receive 25 copies of the issue in which their contributions appear. Extracted reprints, if ordered in advance, will be furnished at cost.

Address manuscripts and proofs to

B. L. ROBINSON, 3 Clement Circle, Cambridge, Mass.

Subscriptions, advertisements, and business communications to W. P. RICH, 300 Massachusetts Avenue, Boston, Mass.

Entered at Boston, Mass., Post Office as Second Class Mail Matter.

BOTANICAL BOOKS, New and Second Hand PRESTON & ROUNDS CO., Providence, R. I.

CARD-INDEX OF NEW GENERA, SPECIES AND VARIETIES OF AMERICAN PLANTS, 1885 TO DATE.

For American taxonomists and all students of American plants the most important supplement to the Index Kewensis, this catalogue in several ways exceeds the latter work in detail, since it lists not only the flowering plants, but pteridophytes and cellular cryptogams, and includes not merely genera and species, but likewise subspecies, varieties and forms. A work of reference invaluable for larger herbaria, leading libraries, academies of sciences, and other centers of botanical activity. Issued quarterly, at \$22.50 per 1000 cards.

GRAY HERBARIUM of Harvard University, Cambridge, Mass., U. S. A.

CHECK LIST OF GRAY'S MANUAL, 7th EDITION, compiled by M. A. DAY. Leatherette. Pocket size. Invaluable for collector's memoranda and herbarium records. Published and sold by the GRAY HERBARIUM, Cambridge, Mass. Price postpaid 20 cts. each. Ten copies \$1.50.

MEMOIRS OF THE GRAY HERBARIUM. A series of illustrated quarto papers issued at irregular intervals, sold separately.

Vol. I. Monograph of the genus Brickellia, by B. L. Robinson (with 96 text figures effectively illustrating all known species of the genus). Feb. 1917. \$3.00.

Gray Herbarium of Harvard University, Cambridge, Mass.

Advertisements of Nurserymen and Dealers in Botanical and other Scientific Publications are inserted in these pages at the following rates per space of 4 in. by 3-4 in. 1 year \$4.00, 6 months \$2.50.

Rhodora

JOURNAL OF THE

NEW ENGLAND BOTANICAL CLUB

Conducted and published for the Club, by

BENJAMIN LINCOLN ROBINSON, Editor-in-Chief

MERRITT LYNDON FERNALD HOLLIS WEBSTER CARROLL WILLIAM DODGE

Associate Editors

WILLIAM PENN RICH EDWARD LOTHROP RAND Publication Committee

VOLUME 26

1924

Boston, Mass.
300 Massachusetts Ave.

Preston and Rounds Co.

Digitized by the Internet Archive in 2023 with funding from Kahle/Austin Foundation

TRhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 26.

December, 1924.

No. 312.

NOTES ON SOME PLANTS OF EASTERN NEW YORK. H. K. SVENSON

THE following account is concerned with some noteworthy plants of eastern New York, at least two of them being new to the State. Unfortunately these records were not communicated to Dr. House in time for publication in the recent list of the plants of New York State.¹

BIDENS BIDENTOIDES (Nutt.) Britton. A single specimen of this characteristic species, known previously only from the region of Delaware Bay, was collected by Mr. N. C. Fassett of Harvard University, on the shore of the Hudson River at Glenmont, in September 1922. A visit by the writer to this locality in October 1922, revealed no further material, but across the river in Rensselaer the plant was found in abundance in shallow water, partially submersed at high tide. At Hudson, some thirty miles below Glenmont, in October 1923, it appeared commonly on tidal shores. It is therefore to be looked for throughout the Hudson estuary.

ELATINE AMERICANA (Pursh) Arnott. Described by Fernald² as occurring "on tidal flats of Cathance River in Maine and on the tidal flats of the Delaware, as well as at a few other stations along the Atlantic coast." This plant was collected on tidal mud at Hudson, N. Y. in October 1923, and is probably the first true record from New York State. Two additional records for this rare plant are from New Brunswick: tidal shores of Kennebecasis River, Lakeside, August 25, 1923, Fassett & Svenson, no. 2015; tidal shores, Mirimichi River, five miles above Newcastle, August 19, 1923, Fassett & Svenson, no. 2016.

¹ House, H. D.; N. Y. State Mus. Bull. no. 254 (1924).

² Fernald, M. L., RHODORA xix. 11 (1917).

ALCHEMILIA VULGARIS L.; Fernald & Weigand, Rhodora xiv. 232 (1912). First noted in the fall of 1923, growing in a cool, shady spot on the campus of Union College, but may have existed there previously. It has persisted in flowering state through the summer of 1924 and may be said to be well established. From the United States the lady's mantle has been previously reported only as casual at Westford, Massachusetts. It is a well-known weed in Nova Scotia.

Eleocharis diandra C. Wright. This occurs with Elatine americana on tidal mud at Hudson, N. Y.

Scirpus Smithii Gray. On tidal mud at Coeymans, N. Y., October 1923, accompanied by Limosella subulata Ives.¹ These are stations additional to those given by House in the list previously mentioned.

The writer is indebted to Mr. Fassett for comparing specimens of most of the preceding plants with typical specmens in the Gray Herbarium.

Union College, Schenectady.

FLORA OF PENIKESE, FIFTY YEARS AFTER.

Edited by I. F. Lewis.

(Continued from page 219.)

Gramineae

Agropyron repens (L.) Beauv. [Triticum repens L.]. Common. Agrostis capillaris L. [A. vulgaris With.]. Common, hills and beaches.

Ammophila breviligulata Fernald [Calamogrostis arenaria Roth]. Beaches.

Anthoxanthum odoratum L. Common over entire island.

- *Avena sativa L. Behind cottages and on Tub Point.
- *Bromus secalinus L. Waste ground, east; rare. Chaetochloa sp. [Setaria sp.]. Dry Pond.
- *Dactylis glomerata L. Fairly common, beaches and hillsides.
- *Danthonia spicata L. (Beauv.). Grassland everywhere.

Elymus virginicus L. Low wet places, west; also Gull Island.

Festuca elatior L. Fairly common, dry soil.

¹ For nomenclature see Fernald, M. L., RHODORA xx. 164 (1918).

*Festuca rubra L. Common in dry soil.

Holcus lanatus L. Common everywhere.

*Panicum Lindheimeri Nash var. fasciculatum (Torr.) Fernald. Dry sandy soil.

*Panicum oricola Hitch. & Chase. Fairly common, dry soil.

Phleum pratense L. Fairly common.

Poa pratensis L. Fairly common.

Spartina alterniflora Loisel. [S. stricta Roth var. alterniflora Gray]. Moist ground, eastern shore; Gull Island.

Spartina patens (Ait.) Muhl. [S. juncea Willd.]. Low marshy ground, Tub Point.

Cyperaceae

*Carex albolutescens Schwein. (C. Longii Mack.) Dry soil on Neck and elsewhere.

*Carex muricata L. Barren ground, rare.

*Eleocharis obtusa (Willd.) Schultes. Edge of ponds.

Eleocharis palustris (L.) R. & S. Leper Pond.

Scirpus americanus Pers. [S. pungens Vahl]. Typha and South Ponds.

Scirpus paludosus A. Nelson [S. maritimus L.]. Ponds and swamp. *Scirpus validus Vahl. Tern Pond.

Juncaceae

- *Juneus acuminatus Michx. Typha Pond.
- *Juncus debilis Gray. Dry sandy ground.
- *Juncus effusus L. Leper Pond.
- *Juncus Greenei Oakes & Tuck. Common on grassy uplands.

Juneus tenuis Willd. Sandy and gravelly places near beaches.

Liliaceae

- *Asparagus officinalis L. Eastern shore and behind cottages.
- *Lilium tigrinum Ker. Behind cottages.
- *Smilax rotundifolia L. Dry hillside above hospital.

Iridaceae

Iris versicolor L. Typha and South Ponds; elsewhere in moist places.

Sisyrhinchium angustifolium Mill. [S. Bermudianum L.]. South Pond.

Myricaceae

*Myrica carolinensis Mill. One patch near south shore.

Salicaceae

*Populus alba L. Hospital grounds.

*Populus deltoides Marsh. Hospital grounds.

*Salix alba × fragilis. Typha Pond and elsewhere.

*Salix pentandra L. Typha Pond and along eastern shore.

Fagaceae

*Quercus rubra L. West of hospital and along path near wharf.

Polygonaceae

*Polygonum acre HBK. Moist edges of ponds.

Polygonum aviculare L. Sandy soil; beach; garden.

*Polygonum Convolvulus L. Tub Point.

Polygonum Persicaria L. Dry Pond.

Rumex Acetosella L. Common in dry barren soil.

Rumex crispus L. Common in dry ground; Gull Island.

*Rumex maritimus L. var. fueginus (Phil.) Dusen. Edge of Typha Pond.

Chenopodiaceae

*Atriplex hastata L. Very common on beaches; Gull Island. Chenopodium album L. Fairly common on beaches.

Amaranthaceae

Amaranthus retroflexus L. Tern nesting ground; Tub Point.

Aizoaceae

Mollugo verticillata L. In sand near garden.

Caryophyllaceae

Ammodenia peploides Rupr. [Arenaria peploides L.]. Occasional, beaches.

- *Cerastium vulgatum L. Abundant in dry barren ground.
- *Dianthus barbatus L. (Escaped.) Behind cottages.
- *Gypsophila paniculata L. (Escaped.) Behind cottages.

*Lychnis alba Mill. Tub Point.

Sagina procumbens L. Stony soil on Neck.

Spergularia marina (L.) Griseb. [S. salina Presl.]. Rare, beach on eastern side.

*Spergularia rubra (L.) Presl. Common in stony barren ground.

*Stellaria graminea L. Dry grassland, not common.

Stellaria media (L.) Cyrill. [S. media Smith]. Behind cottages and near hospital.

Portulacaceae

Portulaca oleracea L. Garden.

Ranunculaceae

*Ranunculus acris L. Behind cottages and occasional in grassland.
Ranunculus Cymbalaria Pursh. Tern Pond.

*Ranunculus delphinifolius Torr. Tern Pond.

Cruciferae

*Brassica juncea (L.) Cosson. High ground, Tub Point.

Cakile edentula (Bigel.) Hook [C. americana Nutt.]. Beaches; Gull Island.

Capsella Bursa-pastoris (L.) Medic. Near hospital.

Lepidium virginicum L. Dry soil, common.

Raphanus Raphanistrum L. Tub Point.

*Raphanus sativus L. (Escaped.) Behind cottages.

*Sisymbrium altissimum L. Tub Point and east shore.

Sisymbrium officinale (L.) Scop. Fairly common, beaches and near hospital.

Rosaceae

*Amelanchier oblongifolia (T. & G.) Roem. South end of island. Fragaria virginiana Duchesne. West of hospital.

Potentilla argentea L. Behind cottages and on dry soil near beaches.

*Potentilla monspeliensis L.

*Potentilla pumila Poir. Fairly common on dry hillsides.

*Rosa carolina L.

*Rosa rugosa Thunb. (Escaped.) Occasional.

*Rubus frondosus Bigel. Dense thicket, Tub Point.

*Rubus laciniatus Willd. Tub Point.

Rubus procumbens Muhl. [R. villosus Ait.]. Common locally, in patches.

*Prunus serotina Ehrb. South end of island.

Leguminosae

Lathyrus maritimus (L.) Bigel. Edge of beaches; Gull Island.

*Trifolium agrarium L. Hillside west of hospital.

Trifolium arvense L. Fairly common, dry fields.

*Trifolium pratense L. Along walk near wharf.

Trifolium repens L. Dry fields.

*Vicia Cracca L. East shore.

*Vicia tetrasperma (L.) Moench.

Oxalidaceae

Oxalis stricta L. Dry barren ground; near hospital.

Geraniaceae

*Geranium carolinianum L. Burnt-over place near hospital.

Callitrichaceae

*Callitriche heterophylla Pursh. Typha Pond.

Anacardiaceae

*Rhus typhina L. Hillside west of hospital.

Vitaceae

*Psedera quinquefolia (L.) Greene. Over old sheds near hospital.

Malvaceae

Malva rotundifolia L. Behind cottages.

Aceraceae

*Acer platanoides L. Established on slope above hospital.

Violaceae

Viola fimbriatula Sm. [V. sagittata Ait. (?)]. Dry hills, south end of island.

Hypericaceae

*Hypericum perforatum L. Occasional in grassland.

Onagraceae

Isnardia palustris L. [Ludwigia palustris L.]. Typha Pond.

*Oenothera biennis L. Occasional in grassland and near beaches.

*Oenothera grandiflora Ait. (Escaped.) Behind cottages.

Haloragidaceae

Myriophyllum pinnatum (Walt.) B. S. P. [M. scabratum Mx.]. Typha and Tern Ponds.

Umbelliferae

*Daucus Carota L. Dry soil throughout.

*Ligusticum scothicum L. Beaches.

Primulaceae

Anagallis arvensis L. Behind cottages and near wharf.

Oleaceae

*Ligustrum vulgare L. (Escaped.) Behind cottages.

Asclepiadaceae

*Asclepias syriaca L. Rare.

Convolvulaceae

*Convolvulus arvensis L. Dry stony soil on Neck.

Convolvulus sepium L. var. pubescens (Gray) Fernald [Calystegia sepium R. Br.]. Fairly common; Gull Island.

Labiatae

Leonurus Cardiaca L. Locally abundant; Tub Point and Neck.

*Lycopus americanus Muhl. Typha Pond.

*Lycopus uniflorus Michx. Low wet places.

Nepeta Cataria L. Patches near reservoir and hospital.

Scutellaria epilobiifolia Hamilton [S. galericulata L.]. Typha Pond.

Teucrium canadense L. var. littorale (Bick.) Fernald. Gull Island only.

Solanaceae

*Datura Stramonium L. Beach south of wharf. Solanum nigrum L. Common, edges of Dry Pond.

Scrophulariaceae

*Digitalis purpurea L. (Escaped.) Behind cottages.

*Ilysanthes inequalis (Walt.) Pennell. Typha Pond.

Linaria canadensis (L.) Dumont. Common, dry sandy soil.

*Linaria vulgaris Hill. Behind cottages.

Verbascum Thapsus L. Fairly common around east shore.

Plantaginaceae

Plantago lanceolata L. Abundant, especially near shore.

Plantago major L. Abundant, south and east shore.

Rubiaceae

*Galium trifidum L. Fairly common on hills, south end.

Caprifoliaceae

*Lonicera japonica Thunb. Established locally, Tub Point and elsewhere.

*Sambucus canadensis L. North end of island near Dry Pond.

Cucurbitaceae

*Cucurbita maxima Duchesne. (Escaped.) Behind cottages and on Neck.

Compositae

Achillea Millefolium L. Common; also Gull Island.

Ambrosia artemisiifolia L. Common; also Gull Island.

Anthemis Cotula L. [Maruta Cotula DC.]. Near hospital.

*Aster undulatus L. Dry soil.

*Aster vimineus Lam. Dry soil.

*Bidens connata Muhl. var.? Dry Pond.

Chrysanthemum Leucanthemum L. [Leucanthemum vulgare Lam.]. Common throughout.

Cirsium arvense (L.) Scop. South end of island.

Cirsium lanceolatum (L.) Hill. Hills, not common.

*Coreopsis lanceolata L. (Escaped.) Behind cottages.

Erechtites hieracifolia (L.) Raf. Beaches, common.

*Euthamia tenuifolia (Pursh) Greene. Western slopes.

*Gnaphalium polycephalium Michx. Dry hillsides.

*Helianthus annuus L. Tub Point.

*Leontodon autumnalis L. var. pratensis (Link) Koch. Behind cottages.

Leptilon canadense (L.) Britton [Erigeron canadense L.]. Near hospital.

*Leptilon pusillum (Nutt.) Britton. Near hospital.

*Rudbeckia hirta L. Hills on east side.

*Solidago canadensis L. Southwest slopes.

*Solidago juncea Ait. Dry bank, S. W.

*Solidago nemoralis Ait. Hillsides, south end.

*Solidago rugosa Mill var.? Hillsides, east end.

Solidago sempervirens L. Common on beaches; also Gull Island.

*Sonchus arvensis L. Hill west of hospital.

*Sonchus asper (L.) Hill. Near wharf.

*Sonchus oleraceus L. Near beaches.

Taraxacum officinale Weber [T. Dens-Leonis Desf.]. Not common. Xanthium sp. Typha Pond.

A complete set of exsiccatae of marine algae and land plants (except fungi) has been deposited in the herbarium of the Marine Biological Laboratory, and duplicates at the herbarium of the University of Pennsylvania and at the Gray Herbarium of Harvard University.

EXPLANATION OF PLATES 146 AND 147.

The five views reproduced on plates 146 and 147 correspond to photographs numbered 1, 2, 4, 11 and 12, respectively, in a series of fifteen views taken for the purpose of record and to be preserved at the Marine Biological Laboratory at Woods Hole. The points from which these views were taken are indicated on the map.

PLATE 146. Upper view: Looking up the Neck, showing strand (phot. no. 1). Middle view: Same, looking over tidal flat toward hospital (phot. no. 2). Lower view: Typha Pond, looking southwest toward outbuildings in hospital grounds (phot. no. 4).

PLATE 147. Upper view: Looking southeast across area denuded by nesting terms (phot. no. 11). Lower view: Dry Pond, looking north (from phot. no. 12).

DOUBLE-HEADED GENERIC NAMES.

KENNETH K. MACKENZIE.

HILL'S British Herbal published in 1756 is a most excellent piece of work. The various genera and species are fully described, and all of the genera are carefully and well illustrated. Unfortunately Hill, in company with some other writers of his time, had ideas of his own about generic names. Most of the genera recognized by him were given by him under generic names consisting of but one word, and, of course, as to these there is no trouble. But in addition to such generic names he had some fifty-one other genera, to which he gave generic names consisting of two separate words. He never used a hyphen connecting the two words so used by him in order to form

a compound word but he always wrote them as two separate words. Under genera so named he listed various species. For example he had a genus (p. 409) Pimpinella saxifraga and under it three species Pimpinella saxifraga foliis variis; Pimpinella saxifraga minor; and Pimpinella saxifraga foliis laciniatis. Sometimes, however, the specific name would not entirely follow the generic name. For example, he had a genus Lactuca Hortensis (p. 444) but the only species under it was named Lactuca vulgaris. Hill's ideas on nomenclature are indeed very hard to follow, for he even had two genera of the same name, Lunaria, one belonging to the Cruciferae (p. 258) and the other (p. 530) being Botrychium.

Most of Hill's double-headed generic names apply to genera which were given other generic names by Linnaeus, but there are a very considerable number of such names which are the earliest generic names for the genera involved published after 1753. If we use one of these names they all should be used. If we reject some we should reject them all. If we insert a hyphen with some, so as to make them compound words, we should insert a hyphen with them all.

My own view is that all such names should be entirely rejected and that the rule promulgated by Linnaeus should be followed "Nomina generica ex duobus vocabulis integris, ac distinctis facta, e Republica Botanica releganda sunt" (Philosophia Botanica Sec. 221). This is the rule which has almost invariably been followed by botanists in practice.

How important is the question involved, is shown by the following examples taken from Hill's work:

- (1) Speculum Veneris (p. 75) antedates Specularia Heist. (1763).
- (2) Bursa pastoris (p. 260) antedates Bursa Weber (1780) and Capsella Medic. (1792).
- (3) Raphanus rusticanus (p. 260) antedates Armoracia Ludwig (1757).
- (4) Gramen caninum (p. 496) antedates Agropyron J. Gaertn. (1770).
- (5) Gramen nemorosum (p. 502) antedates Juncoides Adans. (1763) and Luzula D.C. (1805).
- (6) Filix mas (p. 527) antedates Thelypteris Schmidel (1762): Dryopteris Adans. (1763); and Aspidium Sw. (1801).
- (7) Filix foemina (p. 528) antedates Pteridium Scop. (1760). One of Hill's double-headed genera, described by him on page 516

is Vitis idea (Vitis idea in his Index). This has been taken up as Vitis-idea. It seems to me that the use of this name should be given up.

A similar double-headed generic name is *Uva Ursi*. This was used by Miller (Gard. Dict. Abr. Ed. 4) in 1754, and as *Uva-Ursi* has been taken up in place of *Arctostaphylos* Adans. (1763). It seems to me that the use of this name should also be abandoned. The alternative would be to retain *Vitis-idaea* and *Uva-Ursi* and also take up *Speculum-Veneris*, *Bursa-pastoris*, *Raphanus-rusticanus*, *Gramen-caninum*, *Gramen-nemorosum*, *Filix-mas*, and *Filix-foemina*.

Maplewood, New Jersey.

A YELLOW-FRUITED FORM OF ILEX MYRTIFOLIA.—The fruit of all our native species of *Ilex*, except *I. glabra*, *I. lucida*, and *I. Krugiana*. is normally some shade of red or orange. Yellow-fruited forms have been described in I. opaca (f. xanthocarpa Rehder), I. laevigata (f. Herreyi Robinson), and I. verticillata (f. chrysocarpa Robinson). A form of *Ilex cassine* with yellow fruit is mentioned in the manuals. but seems never to have received a name. Yellow-fruited specimens of Ilex murtifolia Walt., a species closely related to I. cassine but apparently distinct, were received at the Bureau of Plant Industry in December, 1922, from Mr. George D. Lowe, who had collected them at Baxley, Georgia. More ample specimens have recently been sent by Mr. Lowe, who comments on the attractive appearance of the vellow-fruited shrub, and states that it is known to him only from a small area in the vicinity of Baxley, usually occurring singly at widely separated points, but at one locality about a cypress pond forming about half of the stand, and amounting probably to a thousand plants in a quarter-mile radius. The yellow form has been observed at this last spot for thirty years or more. In view of the possibility of the introduction of this plant into the nursery trade, it may well be distinguished by a formal name.

ILEX MYRTIFOLIA forma **Lowei**, forma nova.—Fruit golden yellow; leaves linear-elliptic or elliptic, 8-21 mm. long, 2-4 mm. wide.—Georgia: Vicinity of Baxley, November, 1923, *George D. Lowe* (type no. 1, 189, 988, U. S. Nat. Herb.; dupls. in herb. Arnold Arb., Gray Herb., N. Y. Bot. Gard.).—S. F. Blake, Bureau of Plant Industry, Washington, D. C.

Vol. 26, no. 311, including pages 201 to 220 was issued 5 January, 1925.

ERRATA

Page 10, line 23, for Calyphogeia read Calypogeia.

- " 17, " 10, for Dipsaceae read Dipsacaceae.
- " 18, " 5, for D. Melo read C. Melo.
- " 19, " 7, for perfoliata read perfoliata.
- " 34, " 21, for ACHILLAEA read ACHILLEA.
- " 50, " 2, for rejicienda read rejicienda.
- " 54, " 31, for Mason read Maxon.
- " 56, " 20, for (Lindh.) read (Lindl.).
- " 60, " 18, for 56 read lvi.
- " 70. " 45. for Austineae read Austinae.
- " 71, " 12, for canescens read Canescens.
- " 80, " 36, for 7 cm. read 1 cm.
- " 106, " 5, for ci iatis read ciliatis.
- " 107, " 31, for (DC) read (DC.).
- " 109, " 13. After this line insert lines 13-15 from page 110.
- " 109, " 19, for (DC) read (DC.).
- " 110, dele lines 13-15.
- " 125, line 6, for L. read H.
- " 149, " 6, for tubuliforme read tubuliformis.
- " 159, " 18, for HEXANDRAS read HEXANDRA.
- " 175, " 14, dele the artist-botanist.
- " 199, " 26, for Thalium read Thalianum.
- " 214, " 14, for Annfeldtia read Ahnfeldtia.

INDEX TO VOLUME 26.

New scientific names are printed in full-face type.

Acanthospermum, 34; australe, 34. Acer platanoides, 226; saccharum, 128.

Aceraceae, 226.

Achillea, 34, 185, 187, 232; lanulosa, 34; Millefolium, 34, 184, 185, 186, 228; ptarmica, 34; tomentosa, 34.

Achlya, 218.

Achnanthes longipes, 193, 215. Acrochaetium virgatulum, 214. Actinococcus subcutaneus, 214. Actinocyclus crassus, 193, 215;

Ehrenbergii, 193, 215.

Actinoptychus undulatus, 193, 194,

Adiantum pedatum, 177.

Ageratum, 34; Houstonianum, 34;

mexicanum, 34.
Agoseris, 126, 127; gaspensis, 125; gracilens, 125.
Agrimonia Eupatoria, 39; gryposepala, 39.

Agropyron, 230; repens, 185, 222. Agrostis alba, 2, 185; var. aristata, 2; capillaris, 2, 185, 222; pal-ustris, 139; tenuis, 2; f. aristata, 2; vulgaris, 2, 222; vulgaris aristata, 2.

Ahnfeldtia, 189, 232; plicata, 214. Aizoaceae, 224.

Alchemilla vulgaris, 222.

Algae of British Columbia, Further Notes on, 160.

Alsine, 171; pubera tennesseensis, 169, 171; pubera, var. tennesseensis, 170; tennesseensis, 170, 171.

Amaranthaceae, 224.

Amaranthus retroflexus, 186, 224. Ambrosia, 35, 187; aptera, 35; artemisiifolia, 35, 184, 185, 228; trifida, 35; var. integrifolia, 35.

Amelanchier, 178; Bartramiana, 178, 179; Flowering Dates for, 178; laevis, 178, 179; oblongi-folia, 225; sanguinea, 179.

America, The Dwarf Antennarias of Northeastern, 95; New or recently restudied Plants of Eastern, 122.

American Lespedezas, Notes on, 25. Ammodenia peploides, 184, 224.

Ammophila, 185; breviligulata, 184,

Amphithrix, 161, 162; janthina, 162. Amphora Grevilleana, 193, 216; obtusa, 193, 216.

Anabaena affinis holsatica, 162; flos-aquae, 162; inaequalis, 162; oscillarioides, 162; var. steno-spora, 211; torulosa, 190, 191, 212. Anacardiaceae, 226.

Anagallis arvensis, 185, 186, 227: Anaphalis, 35; margaritacea, 35.

Andean plants in the northern Hemisphere, 89.

Andrews, Luman [notice of work],

Aneura palmata, 7. Ankistrodesmus falcatus, 164, 211. Antennaria, 35; albicans, 97, 100, 101, 102; alpina, 95, 96, 97, 98, 99, 102; var. cana, 98, 99; var. canescens, 98; var. typica, 98; var. ungavensis, 98; angustata, 98; appendiculata, 97; arida viscidula, 101; Brainerdii, 97; cana, 96, 98, 99, 102; canadensis, 35, 97; carpathica, 100; eucosma, 96, 100; fallax, 35, 97; glabrifolia, 97; isolepis, 97, 102; lanata, 101a, 97, 1801epis, 97, 102, ianara, 100; neglecta, 35, 97; neodioica, 35, 97; var. grandis, 35; nitida, 96, 97, 101, 102; occidentalis, 35, 97; Parlinii, 35, 97; Peasei, 97, 101, 102; petaloidea, 35, 97; plantaginifolia, 35, 97; var. petiolata, 35; nulcharvima, 96, 100; lata, 35; pulcherrima, 96, 100; pulvinata, 102; pygmaea, 96, 99, 100, 102; solitaria, 97; Sornborgeri, 96, 98, 102; spathulata, 97; straminea, 96, 100, 102; subviscosa, 97, 101, 102; umbrinella, 102; vexillifera, 96, 99, 102; viscidula, 101.

Antennarias of Northeastern

America, The Dwarf, 95.
Anthemis, 36; arvensis, 36; var.
agrestis, 36; Cotula, 36, 228; tinctoria, 36.

Anthoceros laevis, 13. Anthocerotaceae, 13.

Anthoxanthum odoratum, 185, 222. Anthrodesmus octocornis, 209.

191: Antithamnion americanum, cruciatum, 214. Aphanocapsa Grevillei, 162.

Aphanotheca pallida, 162; saxicola, 162.

Archangelica Gmelini, 188.

Arctium, 36; Lappa, 5, 36; minus, 5, 36; var. corymbosum, 5; var. paniculatum, 5; nemorosum, 5,. 36: tomentosum, 36.

Arctostaphylos, 231. Arenaria peploides, 224. Arethusa bulbosa, 176.

Armoracia, 230.

Arnica, 103; alpina, 103, 104, 105, 106, 107; The eastern American Representatives of, 103; alpina, var. Lessingii, 105; angustifolia, 104, 105; arnoglossa, 106, 107; chionopappa, 104, 105, 106, 107; gaspensis, 104, 105, 106, 107; Griscomi, 104, 105, 106, 107; mollis, 103, 104; montana 8 alpina, 104; plataginea, 103, 104; nontana 8 alpina, 104; plataginea, 103, 104, 106, 107; pulchella, 103, 104, 107; Sornborgeri, 104, 105 107.

Artemisia, 36; Absinthium, 36; annua 36; biennis, 36; caudata, 36; biennis, 36;

36; ludoviciana, 36; pontica, 36; Stelleriana, 36; vulgaris, 36.

Arthrodesmus, 204, 208; convergens, 208; Incus, 209. Arthrospira Gomontiana, 215.

Asclepiadaceae, 227.

Asclepias phytolaccoides, 176; quadrifolia, 176; syriaca, 227; tuberosa, 175; verticillata, 175, 176. Ascophyllum, 189, 190; nodosum,

Asparagus officinalis, 186, 223. Asperococcus echinatus, 213.

Asperula, 13; odorata, 13.

Aspidium, 230; aculeatum, 90; var. scopulinum, 89, 90, mohrioides, 50, 89, 90, 92; simulatum, 49; Thelypteris, 187, 219. Asplenium Pringlei, 50.

Aster, 55; acuminatus, 55; amethystinus, 55; commutatus, 55; cordifolius, 55; var. polycephalus, 55; divaricatus, 55; dumosus, 55; var. coridifolius, 55; var. strictior, 55; ericoides, 56; var. villosus, 56; Herveyi, 56; infirmus, 56; laevis, 56; var. amplifolius, 56; lateriflorus, 56; var. hirsuticaulis, 56; linariifolius, 56; longifolius, 56; lucidulus, 4; lucidus, 5; macro-

phyllus, 56; var. ianthinus, 56; multiflorus, 56; var. exiguus, 56; nemoralis, 57; var. Blakei, 57; novae-angliae, 57; f. roseus, 57; novi-belgii, 57; var. atlanticus, 57; var. Brittonii, 57; var. laevigatus, 57; var. litoreus, 57; f. roseus, 57; panieulatus, 57; var. acutidens, 57; var. simplex, 58; patens, 58; polyphyllus, 58; puniceus, 4, 58; var. compactus, 58: var. demissus, 58; var. firmus, 58; var. lucidulus, 4; var. lucidus, 4; radula, 58; salicifolius, 58; spectabilis, 58; subulatus, 58, tardiflorus, 58; tenuifolius, 58; 176; Tradescanti, 58; umbellatus, 58; undulatus, 58, 186, 228; × novi-belgii, 59; vimineus, 58, 185, 228; var. foliolosus, 58; var. saxatilis, 58.

Asterella tenella, 7.

Asterococcus limneticus, 211; superbus, 164.

Athyrium Filix-femina, 219.

Atriplex, 187; arenarium, 176; hastata, 188, 224; patula, 188. Aulacodiscus Argus, 193, 195, 216 Aulacomnium palustre, 219. Auliscus caelatus, 194, 216; var. strigillata, 193, 216.

Avena sativa, 222.

Azalea prinophylla, 4; rosea, 4.

Babcock, E. B., On citing Richardson's Botanical Appendix to Franklin's first Journey, 199. Baccharis, 59; halimifolia, 59.

Baeria, 59; gracilis, var. tenerrima,

59; uliginosa, 59.
Ball, C. R., Extensions of Range and a new Variety in Salix, 135. Basidiomycetes, 195.

Bassia hirsuta, 176.

Batrachospermum moniliforme, 162; vagum keratophytum, 162. Bazzania denudata, 10; trilobata,

Beggiatoa alba marina, 215; mira-

bilis, 215. Bellis, 59; perennis, 59.

Betula alba, var. papyrifera, 195. Biddulphia Favus, 193, 194, 216. Bidens, 59, 82; aristosa, 59; var. Fritcheyi, 59; var. mutica, 59; Beckii, 59, 131; bidentoides, 221; bipinnata, 59; cernua, 60; var. elliptica, 60; var. oligodonta, 60;

comosa, 60; connata, 60, 187, 228; var. fultior, 60; var. petiolata, 60; coronata, 60; discoidea, 82; Eatoni, 82; var. fallax, 82; var. kennebecensis, 177, 178; frondosa, 82; var. pallida, 5; heterodoxa, 177, 178; A new Variety of, 177; heterodoxa, var. interstes, 178; var. monardaefolia, 178; var. orthodoxa, 178; hyperborea, var. cathancensis, 177; var. colpophila, 82, 177; laevis, 82; melanocarpa pallida, 5; trichosperma, 60; var. tenuiloba, 60; vulgata, 82; var. puberula, 82.

Birch, White, 195.
Blake, S. F., Erucastrum Pollichii
in West Virginia, 22; The Name of the Spearmint, 171; Notes on American Lespedezas, 25; vellow-fruited Form of Ilex myrtifolia, 231.

Blasia pusilla, 7.

Blechnum magellanicum, 92. Blepharostoma trichophyllum, 11. Boltonia, 82; asteroides, 82; latisquama, 82.

Boston District, Reports on the Flora of, XLII, 13; XLIII, 34; XLIV, 55; XLV, 82; XLVI, 107; XLVII, 130; XLVIII, 149; XLIX, 166.

Botrychium, 230; matricariaefolium, 50.

Botrydium granulatum, 211. Botryococcus Braunii, 211. Brachythecium acutum, 219. Brassica juncea, 225. Brauneria, 82; pallida, 82. British Columbia Algae, Further

Notes on, 160. Bromus secalinus, 222. Bryum argenteum, 219. Bulbochaete, 211. Bursa, 230.

Bursa pastoris, 230, 231. Buttercup, Water, 187.

acalia, 83; atriplicifolia, suaveolens, 83. 83: Cacalia,

Cakile, 187; americana, 225; edentula, 184, 225.

Calamagrostis arenaria, 222. Callithamnion, 191; Baileyi, 191; corymbosum, 214. Callitrichaceae, 226.

Callitriche heterophylla, 226. Calomelissa (sect. Satureja), 81. Calopogon pulchellus, 177.

Calothrix, 189; confervicola, 190, 212; crustacea, 212; epiphytica, 211; fuscoviolacea, 190, 212; parasitica, 212; parietina, 162; scopulorum, 212.

Calypogeia, 232; fissa, 6, 10; Neesiana, 10; sphagnicola, 6, 10; suecica, 10; Sullivantii, 6, 10; Trichomanis,

Calystegia sepium, 227.

Campanula, 18; aparinoides, 18; glomerata, 18; persicifolia, 18; rapunculoides, 18; rotundifolia, 18; Trachelium, 18; uliginosa,

Campanulaceae, 18. Campylodiscus Thuretii, 193, 216 Cannabis sativa, 133.

Caprifoliaceae, 15, 228.

Capsella, 230; Bursa-pastoris, 186,

arex, 144; albolutescens, 223; Cooleyi, 2; communis, 2; fulva, Carex, 122; fulvescens, 122; Hornschuchiana, 122; var. laurentiana, 122; Hosteana, 122; Hostiana, 122; var. laurentiana, 122; hystericina, 3; var. Cooleyi, 2; f. Dudleyi, 2; hystricina, 2; var. Dudleyi, 2; laxiculmis, 177; Longii, 223; muricata, 223; Pseudo-Cyperus × hystricina, 2; riparia, 177; straminea, 2; var. echinodes, 2; stricta, 177; tenera, 2; var. echinodes, 2; umbellata, 2; f. vicina, 2; var. vicina, 2. Caryophyllaceae, 224.

Castagnea virescens, 213; Zosterae,

Catherinea angustata, 219. Ceanothus americanus, 197.

Celtis occidentalis, 128; var. cras-

sifolia, 128.

Centaurea, 83; adulterina, 83; Cyanus, 83; diffusa, 83; Jacea, 83; var. lacera, 83; maculosa, 83; melitensis, 83; nigra, 83; var. radiata, 83; solstitialis, 83; vochinensis, 83.

Cephalanthus, 13; occidentalis, 13. Cephalozia bicuspidata, 10; catenulata, 11; connivens, 11; curvifolia, 11; fluitans, 11; macrostachya, 11; media, 11; multiflora, 11; virginiana, 11.

Cephaloziaceae, 10.

Cephaloziella bifida, 10; byssacea,

10; divaricata, 10; elachista, 10; Hampeana, 10.

Cephaloziellaceae, 10.

Ceramium fastigiatum, 214; rubrum, 214; strictum, 214.

Ceramiums, 189.

Cerastium viscosum, 188; vulgatum, 188, 224.

Ceratodon purpurascens, 219. Chaenactis, 83; glabriuscula, 83. Chaetoceros coarctatum, 193, 216; decipiens, 193, 216; didymum, 193, 216.

Chaetochloa, 222.

Chaetococcus varians, f. furcata, 193, 216.

Chaetomorpha Linum, 191, 213; melagonium, 213.

Chaetophora elegans, 164.

Chaetosphaeridium globosum, 164.

Chamaecyparis, 180. Chamaesiphon fuscum, 162.

Champia parvula, 214. Characium ambiguum, 111.

Cheilanthes Covillei, 53; Fendleri, 53; fibrillosa, 49, 50; intertexta, 54; lanosa, 52; myriophylla, 54; Parishii, 49, 50; Pringlei, 49; villosa, 49, 53; viscida, 49; villosa, Wootoni, 54.

Chenopodiaceae, 224.

Chenopodium album, 184, 186, 224. Chiloscyphus fragilis, 8; pallescens, 8; polyanthus, 8; var. rivularis, 8; rivularis, 8.

Chlamydomonas, 211; nivalis, 164.

Chlorella vulgaris, 211, 215. Chlorophyceae, 164, 190, 211, 213. Chondria, 189; Baileyana, 191; tenuissima, var. Baileyana, 214.

Chondrus, 189; crispus, 214. Chroococcus macrococcus, 162;

minutus, 162; turgidus, 162. Chorda, 189, 190; Filum, 191,

Chordaria, 189; flagelliformis, 213. Choreocolax Polysiphoniae, 214.

Chrysanthemum, 84; Balsamita, var. tanacetoides, 84; carinatum, Leucanthemum, 84, 228, var. pinnatifidum, 84; Par-

thenium, 84.
Cichorium, 84; Intybus, 84.
Cineraria lyrata, 113, 115.
Cirsium, 84, 218; altissimum, 84; arvense, 84, 186, 228; canum, 84; horridulum, 84; discolor, 84; horridulum, 84; lanceolatum, 84, 186, 228; muticum, 84; var. subpinnatifidum, 84; palustre, 84; pumilum, 84.

Citrullus, 17; vulgaris, 17. Cladonia alcicornis, 148; alpicola, var. Karelica, 145, 146; carassensis, 146; f. digressa, 146; m. digressa, 146; f. irregularis, 146; f. obliqua, 147; f. regularis, 146; m. regularis, 146; f. subregularis, 146; m. spectabilis, 147; cariosa, 148; var. corticata, 145, 146; clavulifera, 145, 146; m. subvestita, 146; crispata, 147; furcata, var. racemosa, 147; m. subclausa, 147; m. subulata, 147; mitrulae, 145; pityrea, var. Zwackhii, m. hololepis, 148; f. subacuta, 148; squamosa, 147, 148; f. botryoides, 148; strepsilis, 148; var. corraloidea, 148; f. glabrata, 148; subcariosa, 145, 147; m. squamulosa, 147; subsquamosa, 147; sylvatica, 148; m. sorediata, 148; symphycarpa, 146; uncialis, 147; m. soraligera, 147.

Cladonias, Some new, 145.

Cladophora, 161, 189, 190; albida, 213; var. refracta, 213; expansa, 213; gracilis, 191.

Closterium 204 205, 211; abruptum. 205; Archerianum, 205; costatum, 205; Cynthia, 205; Dianae, 205; didymotocum, 205; Ehrenbergii, 205, 211; gracile, var. elongatum, 205; incurvum, 205; intermedium, 205; Jenneri, 205; Kutzingii, 205; Leibleinii, 205; Libellula, 205; lineatum, 205; Lunula, 205; moniliferum, 205; parvulum. 206; var. angustatum, 206; pronum, 206; Pseudodianae, 205; Ralfsii, var. hybridum, 206; rostratum, 206; setaceum, 206; toxon, 206; Ulna, 206; Venus, 206.

Cnicus, 84; benedictus, 84. Coburn, L. H., Gentiana linearis var. latifolia in Maine, 40. Coccineae (subsect. Satureja), 81. Cocconeis scutellum, 193, 216.

Coelastrum proboscidium, 165. Coelosphaerium Kutzingianum,

163; Naegelianum, 163. Coleanthus subtilis, 159.

Coleochaete orbicularis, 165. Coleus, 133, 134, 135; Orobanche ramosa on a, 133; Blumei, 133.

Collins, J. F., Two Additions to the Flora of Rhode Island, 220.

Compositae, 34, 55, 82, 107, 130, 149, 166, 228. Conger, P. S., Flora of Penikese Fifty Years after (Desmids), 191,

Connecticut, Holosteum umbel-latum in, 199; Supplementary Report on Desmids of, 203. procephalum conicum, 7.

Conocephalum conicum, Conopholis americana, 128. Conradina canescens, 81.

Convolvulaceae, 227. Convolvulus, 187; arvensis, 227; sepium, 186; var. pubescens, 227. Cook, S. F., Flora of Penikese Fifty Years after (Bryophyta),

219.

Corallina, 189; officinalis, 214.

Corallorhiza trifida, 176.

Coreopsis, 85; lanceolata, 85, 228; rosea, 85; tinctoria, 85; tripteris,

Cornus stolonifera, 139, 144.

Correct Name for the Spearmint, The, 19, 171. Coscinodiscus excentricus, 193, 195, 216; nodulifer, 195, 216; Oculus-

Iridis, var. Morsiana, 193, 216;

radiatus, 195, 216.
Cosmarium, 204, 207, 211; Botrytis, 207; Brebissonii, 207; Broomei, 207; contractum, 207; Cucumis, 207; contractum, 207; Cucumis, 207; Contractum, 207; Cucumis, 207; Contractum, 207; Contrac 207; cyclicum, 207; dentatum, 207; depressum, var. achondrum, 207; Eloisianum, var. depressum, 208; galeritum, 207; granatum, 207; Hammeri, 208; margaritatum, 208; Meneghinii, 208; moni-liforme, 208; obsoletum, 208; ornatum, 208; ovale, 208; Portianum. 208; pseudobroomei, 208; pseudoconnatum, 208; pseudo-nitidulum, var. validum, 208; pseudopyramidatum, 208; punctulatum, 208; pygmaeum, 208; pyramidatum, 208; quadrum, 208; Regnesii, 208; tumidum, 208; Turpinii, 208; undulatum, 208.

Cosmos. 85; bipinnatus, 85. Cotula, 85; coronopifolia, 85. Crantzia, 93; attenuata, 94; lineata, 93, 94.

Crepis, 85; capillaris, 85; foetida, 85; nana, 199, 200; tectorum, 85; vulgaris, 85.

Cruciferae, 225, 230.

Cucumis, 18; Anguria, 18; Melo, 18; sativus, 18.

237

Cucurbita, 18; maxima, 18, 228; Pepo, 18.

Cucurbitaceae, 17, 228 Cyclotella comta, 194, 216.

Cylindrocystis, 204; crassa, 204.

Cylindrospermum majus, 211. Cynthia, 126, 127.

Cyperaceae, 223. Cyperus dentatus, 37.

Cystoclonium, 189; purpurascens, 214; var. cirrhosa, 214; var. stellata, 214.

Cystopteris fragilis, var. laciniata,

Cystopus candidus, 218.

Dactylis glomerata, 185, 186, 222. Daedalea quercina, 218. Danthonia spicata, 185, 186, 222. Dasya elegans, 191. Datura Stramonium, 184, 227. Daucus Carota, 186, 227. Davenport Fern Herbarium, 49.

Davenport, George E., 49, 52, 53,

Day, M. A., (obituary notice of), 41. Deane, Walter., Reports on the Flora of the Boston District, XLII, 13; XLIII, 34; XLIV, 55; XLV, 82; XLVI, 107; XLVII, 130; XLVIII, 149; XLIX, 166.

Delesseria sinuosa, 214. Dennstaedtia punctilobula,

Desmarestia aculeata, 191, viridis, 213.

Desmidium, 210; aptogonum, 210; Baileyi, 210; cylindricum, 210; Swartzii, 210. Desmids of Connecticut, Supple-

mentary Report on, 203.

Desmotrichum undulatum, 213. Dianthus barbatus, 224.

Dichothrix, 161; gypsophila, 161,

163; Orsiniana, 163. Dicksonia punctilobula, 219.

Dicranum flagellare, 219. Dictyosiphon, 189, 190;

ulaceus, 213. Diervilla, 15; florida, 15; Lonicera,

Digitalis purpurea, 227.

Dimorphococcus cordatus, Diplophyllum albicans, 6, 11; Dick-

sonii, 10; taxifolium, 12.

Dipsacaceae, 17, 232. Dipsacus, 17, sylvestris, 17. Ditrichum pallidum, 219. Docidium, 206; baculum, 206. Double-headed Generic Names, 229. Draba verna, 199. Dryas Drummondii, 125. Dryopteris, 230. Dwarf Antennarias of northeastern America, 95. Dyssodia, 85; tenuiloba, 85.

Eastern American Representatives of Arnica alpina, 103; New York, Notes of some Plants of, 221. Eaton, D. C., 52.

Echinacea purpurea, 82.

Echinocystis, 18; lobata, 18. Echinopanax, 124; horridulum, 123. Echinops, 86; sphaerocephalus, 86. Echinospermum deflexum, americanum, 124.

Eclipta, 86; alba, 86. Ectocarpus, 189, 190; confervoides, 191, 213; var. hiemalis, 213; fas-ciculatus, 191, 213; siliculosus, 213; tomentosus, 213.

Eel grass, 184, 190.

Elachistea, 189, 190; fucicola, 213. Elakatothrix gelatinosa, 211.

Elatine americana, 221, 222; minima, 37.

Eleocharis diandra, 37, 222; obtusa, 223; palustris, 223; tuberculosa 37; in New Hampshire, 37. Elymus virginicus, 222.

Empetrum atropurpureum, Eamesii, 93; nigrum, 93; rubrum,

Empusa, 218.

Endoderma Wittrockii, 213. Enteromorpha. 190; clathrata, 191; compressa, 213; intestinalis, 213, 215; Linza, 191, 213; minima, 213; plumosa, 213.

Epigaea repens, 175.

Epilobieae, 48.

Epilobium, 48; under estuarine Conditions, An, 48; glandulosum, adenocaulon 48; var. var. ecomosum, 48; hirsutum, 48.

Erechtites, 86; hieracifolia, 86, 228; var. intermedia, 86; var. praealta, 86

Erigeron, 86; annuus, 86; canadense, 228; canadensis, 86, 186; philadelphicus, 86; pulchellus, 86; pusillus, 86; ramosus, 86; var.

discoideus, 86; var. septentrionalis, 87.

Eriophorum virginicum, f. album, 2; var. album, 2.

Errata, 232.

Erucastrum Pollichii, 22; in West Virginia, 22.

Erysiphe cichoracearum, 218; communis, 218.

Ervthrotrichia ceramicola, 214.

Euastrum, 204, 206; ansatum, 206; bidentatum, 206; binale. 206; f. Gutwinskii, 206; var. retusum, 206; crassum, 206; evolutum, var. integrius, 207; gemmatum, 207; insulare, 207; oblongum, 207; pictum, 207; sinuosum. var. reductum, 207; verrucosum, 207. Eulespedeza, (sept. Lespedeza), 22

Eulespedeza (sect. Lespedeza), 33. Eupatorium, 87; aromaticum, 87; falcatum 87; perfoliatum, 87; f. purpureum, 87; var. truncatum, 87; pubescens, 87; purpureum, 87; rotundifolium, 87; sessilifolium, 87; urticaefolium. 87; verbenaefolium, 87; verticillatum, 87.

Euphorbia polygonifolia, 176 Eupodiscus Argus, 193, 195, 216. Euthamia tenuifolia, 228.

Exoascus Pruni, 218.

Extensions of Range and a New Variety in Salix, 135.

Fagaceae 224.

Farwell, O. A., The correct Name

for the Spearmint, 19.

Fassett, N. C., An Epilobium under estuarine Conditions, 48; A new Variety of Bidens heterodoxa, 177; A Study of the Genus Zizania, 152 nia, 153.

Fatsia, 124; horrida, 123.

Fern Herbarium, Another Daven-

port, 49.

Fernald, M. L., The Dwarf Antennarias of Northeastern America, 95; The Eastern American Representatives of Arnica alpina, 103; A Flora of Springfield, Mass., 179; Juneus triglumis and its American Representative, 201; Myriophyllum magdalenense, a Correction, 198; New or recently restudied Plants of Eastern America, 122; Polystichum mohrioides and some other Subantarctic or Andean Plants in the Northern Hemisphere, 89; Some Senecios of Eastern Quebec and Newfoundland, 113.

Festuca elatior, 185, 186, 222; ovina, 188; rubra, 185, 188, 223. Filago, 88; minima, 88.

Filix foemina, 230, 231. Filix mas, 230, 231.

Flagellatae, 166.

Flaveria, 107; bidentis, 107.
Flora of the Boston District, Reports on, XLII, 13; XLIII, 34; XLIV, 55; XLV, 82; XLVI, 107; XLVII, 130; XLVIII, 149; XLIX, 166; of Penikese Fifty Years after, 181, 211, 222; of Springfield, Mass., 179.
Florida A new Saturaia from 80. Florida, A new Satureja from, 80.

Florideae, 189. Flowering Dates for Amelanchier

Bartramiana, 178. Fogg, J. M., Flora of Penikese Fifty Years after (Spermatophyta), 219.

Fomes applanatus, 218.

Fossombronia Dumortieri, 8; foveolata, 8.

Flagellaria hyalina, 193, 216.

Fragaria virginiana, 225.

Franklin's First Journey, Botanical Appendix to, 199.

Frullania Asagrayana, 12; Brittoniae, 13; eboracensis, 12, 13. Fucus, 189, 190; vesiculosus, 213. Fuirena squarrosa, 180.

Fuligo septica, 218.

Galinsoga, 107; aristulata, 107; bicolorata, 107; caracasana, 107; ciliata, 107; parviflora, 107; var. hispida, 107.

Galium, 13; Aparine, 13; asprellum,

13; boreale, 14; circaezans, 14; Claytoni, 14; erectum, 14; lanceolatum, 14; Mollugo, 14; palustre, 14; pilosum, 14; sylvaticum, 14; tinctorium, 14; trifidum, 14, 187, 228; triflorum, 14; verum, 14.

Generic Names, Double-headed, 229. Gentiana crinita, 175; linearis, var. latifolia, 40; in Maine, 40.

Geocalyx graveolens, 8.

Geraniaceae, 226. Geranium carolinianum, 226.

Glaucium flavum, 127; luteum, 127. Glaucocystis nostochinearum, 212. Gloeocapsa alpina, 163; magna, 162, 163; montana, 163; sanguinea,

162.

Gloeothece Fusco-lutea, 163. Gnaphalium, 108; alpinum, 98; decurrens, 108; obtusifolium, 108;

polycephalum, 108, 228; purpureum, 108; uliginosum, 108.

Gomontia polyrhiza, 213. Gramen caninum, 230, 231. Gramen nemorosum, 230, 231.

Gramineae, 222.

Grammatophora macilenta, 193,

195, 216; marina, 193, 194, 216; serpentina, 193, 216. Gratiola aurea, 37; f. helveola, 37. Gray Herbarium, Contributions from, n. s., No. LXXII, 89, 113. Griffithsia globifera, 191.

Grindelia, 108; robusta, 108. Grinellia americana, 214.

Gypsophila paniculata, 224.

Habenaria flava, 177; lacera, 177. Hackelia, 124; deflexa, var. americana, 124, 125.

Haloragidaceae, 227.

Hantzschia amphioxys, 194, 216; marina, 193, 216.

Hapalosiphon delicatulum, 163. Hazen, T. E., Flora of Penikese Fifty Years after (Algae of fresh and of brackish water), 211, 215.

Hedysarum frutescens, 29,

junceum, 30. Helenium, 108; autumnale, 108; nudiflorum, 108; tenuifolium, 108.

Helianthus, 108; annuus, 108, 228; debilis, var. cucumerifolius, 108; decapetalus, 108; divaricatus, 108; giganteus, 108; grosseserratus, 108; gesserratus, 108; laetiflorus, 109; Maximiliani, 109; mollis, 128; petiolaris, 109; scaberrimus, 109; strumosus, 109; subrhomboideus, 110; tuberosus, 109.

Heliopsis, 109; scabra, 109. Hemicarpha micrantha, 37.

Hemizonia, 109; fasciculata, 109.

Hemlock, 195.

Herposteiron confervicola, 212; Vermiculoides, 165.

Heterokontae, 165, 211.

Moscheutos, 88, 176; Hibiscus oculiroseus, 88; in Rhode Island,

Hieracium, 109; aurantiacum, 109; canadense, 109; florentinum, 109, 129; Gronovii, 109; marianum, 109; paniculatum, 109; f. glandu-

losum, 109; Pilosella, 110; var. viride, 110; praealtum, var. decipiens, 110; scabrum, 109, 110; venosum, 110; var. subcaulescens, 110; vulgatum, 110.

Hingham, Mass., Notes on the Plants of, 175.

Hildenbrandtia, 189; Prototypus, 214.

Holcus lanatus, 185, 186, 223. Holosteum umbellatum, 199; in Connecticut, 199.

Hormotila mucigera, 165.

Hornbeam, 182.
Horse radish, 198.
Houstonia, 14; caerulea, 14; lanceolata, 14; longifolia, 14.
Hunnewell, F. W., Holosteum umbellatum in Connecticut, 199. Hyalodiscus stelliger, 193, 194, 195, 216.

Hyalotheca, 204, 210; dissiliens,

210; mucosa, 210.

Hydrochloa carolinensis, 159; fluitans, 159.

Hydrocotyle chinensis, 93.

Hydropyrum esculentum, 156, 157;

latifolium, 158. Hydrurus, 161; foetidus, 162, 166.

Hyella caespitosa, 212.

Hygroryza aristata, 159. Hylander, C. J., Supplementary Report on Desmids of Connecticut, 203.

Hymenogastraceae, 195. Hypericaceae, 226.

Hypericum perforatum, 185, 226.

Hypheothrix calcicola, 163. Hypochaeris, 110; glabra, 110.

Hypoxylon, 218.

Ilex, 231; cassine, 231; glabra, 231; Krugiana, 231; laevigata, 231; f. Herveyi, 231; lucida, 231; myrti-folia, 231; Yellow-fruited Form of, 231; f. **Lowei**, 231; opaca, 129, 175, 231; f. xanthocarpa, 231; verticillata, 231; f. chrysocarpa,

Ilysanthes inaequalis, 227.

Inula, 110; Helenium, 110; salicina,

Iridaceae, 223.

Iris versicolor, 186, 223.

Irpex, 218. Isactis plana, 190, 212. Isoetes Tuckermani, 37.

Isnardia palustris, 226.

Iva, 110; oraria, 110; xanthifolia,

Jamesoniella autumnalis, 8; Schraderi, 8.

Jasione, 19; montana, 19. Josselyn Botanical Society, annual Field Meeting, 112.

Jubula Hutchinsiae, var. Sullivantii, 13; pennsylvanica, 13. Juncaceae, 223. Juncoides, 230.

Juneus, 186; acuminatus, 187, 223; albescens, 202, 203; biglumis, 203; debilis, 223; effusus, 223; Greenei, 223; tenuis, 223; triglumis, 201, 202, 203; and its American Representative, 201; var. albescens, 202; var. fuscatus, 202; var. nigricans, 202.

Jungermannia barbata, 8; inflata, 8; incisa, 8; lanceolata, 8; marchica, 9; pumila, 8; ventricosa, 9.

Kalmia latifolia, 175. Kantia Trichomanis, 10. Keratococcus caudatus, 212.

Keratococcus caudatus, 212.
Knautia, 17; arvensis, 17.
Knowlton, C. H. Flowering Dates
for Amelanchier Bartramiana,
178; Notes on the Plants of
Hingham, Mass., 175; Reports
on the Flora of the Boston
District, XLII, 13; XLIII, 34;
XLIV, 55; XLV, 82; XLVI, 107;
XLVII, 130; XLVIII, 149;
XLIX, 166 XLVII, 130; XLVIII, 149; XLIX, 166. Krigia, 111, 126; amplexicaulis, 111;

virginica, 111.

Labiatae, 64, 227. Lactuca, 111; canadensis, 111; f. angustipes, 111; var. integri-folia, 111; f. angustata, 111; var. latifolia, 111; f. exauriculata, 111; var. obovata, 111; f. stenopoda, 111; hirsuta, 111; Morssii, 111; Scariola, 111; var. integrata, 111; spicata, 111; vulgaris, 230.

Lactuca Hortensis, 230. Lagenaria, 18; vulgaris, 18. Laminaria, 189; Agardhii, 189, 213; digitata, 189, 213; Platymeris,

189, 214. Lamprocystis roseo-persicina, 215. Lappa intermedia, 5; vulgaris, 5. Lappula americana, 124; deflexa, 125; var. americana, 124.

Lapsana, 130; communis, 130. Lathyrus, 187; maritimus, 184, 226. Layia, 130; platyglossa, 130. Leathesia, 189; difformis, 214. Leersia hexandra, 159, 232; oryzoides, f. glabra, 48.

Leguminosae, 226.

Lejeunea cavifolia, 13; patens, 6,

Lejeuneaceae, 12. Lemanea fucina, 166.

Leontodon, 130; autumnalis, 130; var. pratensis, 130, 228.

Leonurus Cardiaca, 227.

Lepachys, 130; columnaris, 130; pinnata, 130.

Lepidium latifolium, 197; in New England, 197; virginicum, 185,

Lepidozia reptans, 11; setacea, 11. Leptilon canadense, 228; pusillum,

228.

25; acuticarpa, Lespedeza. angustifolia, 26, 29, 32, 33; var. brevifolia, 32; capitata, 26, 31, 32, 33; var. angustifolia, 25; 32, 33; var. angustifolia, 25; frutescens, 26, 29, 30, 31; hirta, 25, 26, 32, 33, 34; var. appressipilis, 32; intermedia, 26, 27, 29, 31, 32; var. Hahnii, 32; juncea, 31; leptostachya, 26, 33, 34; Manniana, 33; neglecta, 29; prairea, 27, 28; procumbens, 25, 27; var. allintica, 26, 27; var. all 27; var. elliptica, 26, 27; repens, 25; reticulata, 25, 31; sessiliflora, 30, 31; simulata, 33; Stuevei, 28, 29; var. angustifolia, 29; Stüvei, 28; Stuvei, 28; var. intermedia, 29, 31; Stuvei neglecta, 29; violacea, 25, 28, 30, 31; violacea prairea, 28; var. prairea, 27, 28; virginica, 25, 29, 30, 31; var. sessiliflora, 30; var. typica, 30, 31.

Lespedezaria (sect. Lespedeza), 33. Lespedezas, Notes on American, 25. Leucanthemum vulgare, 228.

Editor, Flora of Lewis, I. F. Penikese Fifty Years after, 181, 211, 222

Liatris, 130; pycnostachya, 130;

scariosa, 130; spicata, 130. Licmophora flabellata, 193, 216; Lyngbyei, 193, 216; tincta, 193, 216.

Ligusticum scothicum, 188, 227; vulgare, 227.

Lilaeopsis, 93, 94; attenuata, 94; carolinensis, 94; chinensis, 93; lineata, 93, 94; occidentalis, 94; Schaffneriana, 94.

Liliaceae, 223.

Lilium tigrinum, 223.

Limnochloa cauduciflora, 158.

Limosella subulata, 222.

Linaria canadensis, 186, 227; vul-

garis, 227. Linder, D. H., A new Species of Rhizopogon from New Hampshire, 195.

Linnaea, 15; borealis, var. americana, 15.

Lithothamnion, 189; Lenormandi,

Lobelia, 19; cardinalis, 19; f. alba, 19; Dortmanna, 19; inflata, 19; Kalmii, 19. spicata, 19. 19; siphilitica, 19;

Lobeliaceae, 19. Lonicera, 15; caerulea, var. calvescens, 15; var. villosa, 15; canadensis, 15; hirsuta, 15; involucrata, 125; japonica, 15, 228; Morrowi, 15; prolifera, 16; sempervirens, 16; var. flava, 16;

Sullivantii, 16; tatarica, 16; Xylosteum, 16. Lophocolea bidentata, 8; hetero-phylla, 8, 219.

Lophozia alpestris, 8; attenuata, 8; barbata, 8; bicrenata, 8; confertifolia, 8; excisa, 8; incisa, 8; inflata, 8, 9; Kunzeana, 9; longidens, 9; longiflora, 9; marchica, 9; porphyroleuca, 9; ventricosa, 9.

Lophoziaceae, 8. Lorenz, A., A Revision of the Mt. Desert Hepatic List, 6.

Lowe, R. L., Saxifraga Aizoon on Mt. Ktaadn, 168.

Ludvigia alternifolia, 176. Ludwigia palustris, 226. Lunaria, 230.

Lunularia cruciata, 6, 7. Luzula, 230.

Lychnis alba, 186, 224.

Lycopersicum esculentum, 133. Lycopodium annotinum, 177; inun-

datum, 177. Lycopus americanus, 188, europaeus, 188; uniflorus, 186, 187, 227.

Lyngbya aestuarii, 212, 215. Lysimachia quadrifolia, 176.

Mackenzie, K. K., Double-headed Generic Names, 229.

Maine, Gentiana linearis, var. latifolia in, 40. Malva rotundifolia, 226.

Malvaceae, 226.

Marchantia polymorpha, 7.

Marchantiaceae, 7.

Marsupella adusta, 9; aquatica, 9; emarginata, 9; Sullivantii, 9. Maruta Cotula, 228.

Maryland, Pseudotaenidia in, 23. Massachusetts, Notes on some

Plants of southeastern, 127.

Mastigocoleus testarum, 212.

Mastogloia exigua, 193, 216.

Matricaria, 130; Chamomilla, 130; inodora, 130; var. salina, 130; suaveolens, 131.

Medicago virginica, 30.

Megalodonta, 59, 131; Beckii, 131.

Melinum palustre, 157.

Melobesia, 190; LeJolisii, 190, 214; pustulata, 214.

Melosira Borreri, 193, 216; sulcata, 193, 195, 216; f. coronata, 194,

216. Mentha alopecuroides, 173; longifolia, 20, 22, 171, 172, 173, 174, 175; rotundifolia, 21, 172, 173, 174, 175; spicata, 19, 20, 21, 22, 171, 172, 173, 174, 175; β longifolia, 20, 21, 22, 172, 174, 175; γ rotundifolia, 20, 22, 172, 174, 175; α viridis, 20, 21, 22, 172, 173, 174; sylvestris, 20, 21, 22, 172, 173, 175; viridis, 19, 20, 21, 22, 172, 173, 175; viridis, 19, 20, 21, 22, 171, 172, 173, 174. Merismopedia glauca, 162, 163; punctata, 163.

punctata, 163

Mesogloia, 189, 190; divaricata, 214. Mesotaenium, 204; macrococcum,

204. Metzgeria furcata, 7. Micrasterias, 204, 207, 212; americana, 207; var. Boldtii, 207; apiculata, 207; var. fimbriata, 207; Crux-Melitensis, 207; denticulata, 207; laticeps, 207; mahabuleshwarensis, 207; muricata, 207; pinnatifida, 207; radiata, 207; rotata, 207; Sol, 207; truncata, 207. cata, 207.

Microcystis, 211. Microseris, 131; Douglasii, 131. Microspora Willeana, 212.

Microthamnion Kuetzingianum,

Mikania, 131; scandens, 131. Mitchella, 14; repens, 14.

Mnium punctatum, 219.

Mohrioides (sect. Polystichum), 91. Mollugo verticillata, 224.

DECEMBER

Morse, A. P., Lepidium latifolium in New England, 197.

Mougeotia, 161, 212.

Mt. Desert Hepatic List, Revision of, 6; Ktaadn, Saxifraga Aizoon on, 168.

Muenscher, W. C., Orobanche ramosa on a Coleus, 133

Muhlenbergia ambigua, 1; foliosa, f. ambigua, 1; subsp. ambigua, 1; mexicana, f. commutata, 1; subsp. commutata, 1; var. commutata, 1.

Mylia anomala, 9; Taylori, 9. Myrica carolinensis, 185, 224.

Myricaceae, 224.

Myrionema Leclancheri, 214.

Myriophyllum elatinoides, 93, 94; magdalenense, 198; magdalense, 198; pinnatum, 227; scabratum, 227; tenellum, 37, 38.

Myxonema, 212

Myxophyceae, 162, 190, 211, 212.

Najadaceae, 219.

Name of the Spearmint, The, 19, 171.

Naucoria, 218.

Navicula, 217; ambigua, 194, 216; aspera, 193, 216; Bombus, 193, 216; borealis, 194, 216; Braunii, 216; borealis, 194, 216; Braunii, 194, 216; clavata, var. caribaea, 193, 216; dicephala, 194, 216; didyma, 193, 216; distans, 193, 217; elegans, 192, 194, 217; exempta, 193, 217; forcipata, var. densistriata, 193, 217; formosa, 192, 195, 217; fusca, 194, 217; gracilis, 194, 217; Gregorii, 195, 217; Hantzschiana, 194, 217; Hennedevi, 194, 217; hum-217; Hennedeyi, 194, 217; hum-erosa, 194, 217; hungarica, 192; interrupta, 194, 217; Lyra, 194, 117; Nyra, 194, 217; Lyra, 194, 217; var. dilatata, 194, 217; var. elliptica, 194, 217; major, 194, 217; maxima, 194, 217; manella, 192, 193, 217; notabilis, var. expleta, 194, 217; palpebralis, var. angulosa, 194, 217; peregrina, 192, 194, 195, 217; quadratarea, 194, 217; rhynchocephala, 194, 217; Smithii 194, 217; suborbi 217; Smithii, 194, 217; suborbi-cularis, 194, 217; viridis, 194, 217; viridula, 194, 217; Yanensis, 194, 217.

Nardia crenulata, 9; Geoscyphus, 9; obscura, 9.

Nemalion multifidum, 191, 214.

Nepeta Cataria, 227. Netrium, 205; Digitus, 205; var. constrictum, 205. New England, Lepidium latifolium

in, 197

Newfoundland, Some Senecios of,

New Hampshire, Eleocharis tuberculosa in, 37; A new Species of Rhizopogon from, 195. New Satureja from Florida, A, 80;

Variety of Bidens heterodoxa,

177.

Nicotiana Tabacum, 133.

Nitzschia Closterium, 193, 217; fonticola, 194, 217; frustulum, var. perminuta, 194, 217; longis-sima, 193, 194, 217; scalaris, 194, 217; Sigma, 193, 194, 217.

Nodularia Harveyana, 163; paludosa, 211.

Nomenclature, Some Changes in,

North American Scutellarias, Notes on, 61.

Northern Hemisphere, Polystichum mohrioides and some other subantarctic or Andean Plants in, 89.

Nostoc, 161, 211; caeruleum, 163; commune, 162, 163; macrosporum, 163; microscopicum, 163;

punctiforme, 163.

Note on Stellaria pubera, A, 169. Notes on American Lespedezas, 25; on North American Scutellarias, 61; on some Plants of eastern New York, 221. Notholaena Grayi, 49; Schaffneri,

var. mexicana, 49.

Notothylas orbicularis, 13. Nyssa sylvatica, 129.

Odontoschisma denudatum, elongatum, 11.

Oedogonium, 212; longatum, 165. Oenothera angustissima, 3; biennis 3, 4, 185, 186, 226; var. nutans, 3; var. pycnocarpa, 3; grandi-flora, 3, 226; Lamarckiana, 3; muricata, 3, 4; nutans, 3; parviflora, 4; var. angustissima, 3; pycnocarpa, 3.

Oleaceae, 227. Onagraceae, 226.

Onopordum, 131; Acanthium, 131.

Onychonema, 210; filiforme, 210;

laeve, 210. Oocystis, 212; solitaria, 165; solitaria major, 165.

Ophiocytium parvulum, 165.

Oplopanax, 124; horridum, 123, 124. Orobanche, 133; ramosa, 133, 134, 135; on a Coleus, 133.

Orontium aquaticum, 180.

Oscillatoria, 211, 215; amoena, 163, amphibia, 215; chalybea, 164: formosa, 164; margaritifera, 190; 212, 215; princeps, 164; splendida, 164, 211; subuliformis, 215; tenuis, 211.

Ovularia obliqua, 218. Oxalidaceae, 226. Oxalis stricta, 186, 226.

Palafoxia, 131; texana, 131. Pallavicinia Flotowiana, 7; Lyellii, 7.

Palmodictyon varium, 212. Panax horridum, 124. Pandorina Morum, 212. Panicularia nervata, 139.

Panicum albemarlense, 180; Lindheimeri, var. fasciculatum, 223; oricola, 223; spretum, 37; verrucosum, 180.

Parthenium, 131; Hysterophorus, 131.

Pastinaca, 23. Pease, A. S., Eleocharis tuberculosa in New Hampshire, 37.

Pediastrum Boryanum, 165; Boryanum longicorne, 165; tricornutum alpinum, 162, 165.

Pellaea Wrightiana, var. compacta, 49.

Pellia epiphylla, 8.

Pelliaceae, 7.
Penikese, The Flora of Fifty Years after, 181, 211, 222.
Penium, 204, 205; cruciferum, 205; cucurbitinum, 205; margarita-

ceum, 205; Navicula, 205. Penland, C. W., Notes on North American Scutellarias, 61.

Perilomia, 61, 62, 63; ocymoides, 63. Petalonia fascia, 214; var. caespitosa, 214.

Petasites, 131; palmatus, 131; vulgaris, 131.

Phaeophyceae, 189, 190, 213. Phalaris arundinacea, 144. Phallus duplicatus, 196.

Phleum pratense, 186, 223.

Phormidium papyraceum, 212: tenue, 211. Phragmites communis, 154, 156. 159, 175.Phyllophora, 189; Brodaei, membranifolia, 191, 215. 214; Phyllosticta labruscae, 218. Picris, 132; hieracioides, 132. Pimpinella Saxifraga, 230. Pinaceae, 219. Pinus sylvestris, 219. Pitch pine, 182 Plagiochila asplenioides, 9. Plantaginaceae, 228.

Plantago lanceolata, major, 185, 228. 228; 185,

Plants of eastern America, new or recently restudied, 122; of Hingham, Mass., Notes on, 175; of Rhode Island and southeastern Massachusetts, Notes on, 127.

Plasmopara viticola, 218. Platymonas subcordiformis, 190,

Pleurococcus vulgaris, 212. Pleurosigma aestuarii, 194, 217; affine, 194, 217; elongatum, 193, 194, 217.

Pluchea, 132; camphorata, 132. Pleurotaenium, 206; coronatum, 206; nodosum, 206; Trabecula,

Plumaria elegans, 215.

Poa palustris, 139; pratensis, 186,

Podocystis Adriatica, 194, 218; Americana, 194, 218.

Polygonaceae, 224.

Polygonum, 144; acre, 188, 224; amphibium, 3; f. Hartwrightii, 3; f. terrestre, 3; aviculare, 224; Convolvulus, 185, 186, 224; Hydropiper, 188; Muhlenbergii, 3; f. natans, 3; Persicaria, 224; puritanorum, 220; virginianum, 129.

Polysiphonia, 189, 191; elongata, 215; fastigiata, 189, 190, 215; fibrillosa, 191, 215; nigrescens, 190, 215; var. Durkeei, 215; var. fucoides, 215; urceolata formosa, 190; urceolata, var. formosa, 215; var. patens, 215; variegata, 191;

violacea, 215; var. flexicaulis, 216. Polystichum, 89; aculeatum, 91; aculeatum scopulinum, 89; andinum, 90; elegans, 90; Lemmoni, 90, 91, 92; Lonchitis, 89; var.

scopulinum, 89; mohrioides, 89, 90, 91, 92, 93, 94; and some other subantarctic or Andean Plants in the northern Hemisphere, 89; var. elegans, 90, 91, 92; var. Lemmoni, 92; var. plicatum, 90, 91, 92; var. scopulinum, 89, 92, 93, 125; var. typicum, 91; scopulinum, 89, 90, 91.

DECEMBER

Polystictus versicolor, 218.

Polytrichum commune, 219; junip-

erinum, 219; piliferum, 219. Poplar birch, 182. Populus alba, 224; deltoides, 224. Porella platyphylla, 12; platyphylloidea, 12.

Porellaceae, 12.

Porphyra, 190; laciniata, 215.

Portulaca oleracea, 225. Portulacaceae, 225.

Potentilla argentea, 186, 225; monspeliensis, 225; pumila, 225. Prasiola fluviatilis, 162; stipitata,

190, 213.

Prenanthes, 132; alba, 132; altissima, 132; f. hispidula, 132; serpentaria, 132; trifoliolata, 132. Primulaceae, 227.

Pringle, C. G., 52.

Protoderma, 189; marinum, 213.

Protosiphon botryoides, 212. Prunus serotina, 225. Psedera quinquefolia, 226.

Pseudo-eunotia doliolus, 194, 218. Pseudotaenidia, 23, 24; in Maryland, 23.

Psilocarya scirpoides, 180.

Pteridium, 230. Ptilidiaceae, 11.

Ptilidium ciliare, 11; pulcherrimum,

Puccinia, 218; malvacearum, 218; Phlei-pratensis, 218; triticina,

Punctaria, 189, 190; latifolia, 191,

Pylaeiella littoralis, 214.

Quebec, Some Senecios of eastern,

Quercus rubra, 185, 224.

Radula complanata, 12; obconica, 6. 12.

Radulaceae, 12.

Ralfsia, 189; verrucosa, 191, 214. Rand, E. L., obituary notice of. 198. Ranunculaceae, 225.

Ranunculus abortivus, 128; acris, 225; allegheniensis, 128; Cymbalaria, 225; delphinifolius, 225. Raphanus Raphanistrum, 225; sati-

vus, 225.

Raphanus rusticanus, 230, 231.

Rebouliaceae, 7. Red cedar, 182; maple, 182, 183. Reports on the Flora of the Boston District, XLII, 13; XLIII, 34; XLIV, 55; XLV, 82; XLVI, 107; XLVII, 130; XLVIII, 149;

XLVII, 13 XLIX, 166. Revision of the Mt. Desert Hepatic

 ${
m List}, \ 6.$

Rhabdonema Adriaticum, 193, 194,

195, 218.

Rhizoclonium, 190; Kerneri, 213. Rhizopogon, 195; A new Species of, from New Hampshire, 195; occidentalis, 195, 196, 197; truncatus, 196, 197.

Rhizosolenia hebetata, f. semispina, 218; var. semispina, 193; setigera,

193, 218.

in, 88; Notes on some Plants of, 127; Two Additions to the Flora of, 220. Rhode Island, Hibiscus oculiroseus

Rhododendron canadense, 176; nudiflorum, 4; var. roseum, 4;

roseum, 4. Rhododermis Georgii, 190, 215. Rhodomela subfusca, 215. Rhodophyceae, 166, 190, 214.

Rhodymenia palmata, 215.

Rhus typhina, 185, 226. Riccardia latifrons, 7; multifida, 7; palmata, 7; pinguis, 7. Riccardiaceae, 7.

Riccia Sullivantii, 7.

Ricciaceae, 7.

Richardson, Botanical Appendix to Franklin's First Journey, 199. Ricinophyllum, 124; horridum, 124.

Rivularia atra, 212. Robbins, C. A., Some new Cladonias, 145.

Robinson, B. L., Miss Day, 41. Robinson, John, 52.

Rockweeds, 190 Rosa carolina, 225; rugosa, 225.

Rosaceae, 225. Rubiaceae, 13, 228.

Rubus frondosus, 225; laciniatus, 225; procumbens, 185, 225; villosus, 225.

Rudbeckia, 149; hirta, 149, 186, 228; var. tubuliformis, 149, 232;

laciniata, 149; speciosa, 149, 232; laciniata, 149; speciosa, 149. Rumex, 187; Acetosella, 185, 186, 224; crispus, 184, 186, 224; maritimus, var. fueginus, 224. Rushes, 187.

Sagina procumbens, 225. Sagittaria Engelmanniana, 180. Salazaria, 62.

Salicaceae, 224.

Salicornia ambigua, 175. Salix, Extensions of Range and a new Variety in, 135; alba × fragilis, 224; amygdaloides, 137; Bebbiana, 122, 123, 137, 143; var. capreifolia, 123; f. luxurians, 122; var. luxurians, 122, 123; var. perrostrata, 123; brachycarpa, 125; candida, 135, 142, 143; in South Dakota, 142; candida denudeta, 142; candida d candida denudata, 142; cordata, 135, 137, 139, 140; cordata vestita, 139; discolor, 135, 136, vestita, 139; discolor, 133, 130, 138; A new Variety of from South Dakota, 136; discolor overi, 137; fluviatilis, 135; fuseescens, 123; var. hebecarpa, 123; hebecarpa, 123; interior, 135, 137; lucida, 144; lutea, 137, 140; lutea platyphylla, 137; missouriensis, 135, 132, 138, 130, 140, 141; in South 137, 138, 139, 140, 141; in South Dakota, 139; pedicellaris, 123; pellita, 143, 144; in Michigan, 143; pentandra, 224; petiolaris, 135, 141, 143, 144; in the Dakotas, 141; repens, 122; rostrata, 122; var. capreifolia, 123; var. luxurians, 122.

Sambucus, 16; canadensis, 16, 185,

228; racemosa, 16. Sanford, S. N. F., Hibiscus oculiro-seus in Rhode Island, 88; Notes on some Rhode Island and southeastern Massachusetts Plants,

Santolina, 149; Chamaecyparissias, 149.

Sargassum filipendula, 191.

Sarracenia purpurea, 175. Satureja, 80; A new Species of from Florida, 80; Ashei, 80, 81; caroliniana, 81; coccinea, 81; dentata, 81.

Saxifraga Aizoon, 168; on Mt. Ktaadn, 168; stellaris, comosa, 168.

Scabiosa, 17; Columbaria, 17. Scapania curta, 12; dentata, 12; irrigua, 12; nemorosa, 12; paludicola, 12; paludosa, 6, 12; umbrosa, 12; undulata, 12.

Scapaniaceae, 11.

Scenedesmus abundans, 165; arcuatus, 165; bijuga, 165; brasiliensis, 212; quadricauda, 165.

Schizochlamys delicatula, 165.

Schizothrix, 161, 164.

223: Scirpus, 186; americanus, cyperinus, 144; maritimus, 223; paludosus, 187, 223; pungens, 223; Smithii, 38, 223; validus,

Scleria elata, 159, 160; var. de-colorans, 160; var. latior, 160; reticularis, 180; terrestris, 159; var. decolorans, 160; var. latior, 160.

Scoliopleura latestriata, 194, 218.

Scorzonera, 126, 127.

Scrophulariaceae, 227. Scutellaria, 61, 62, 63; altamaha, 74; ambigua, 69; angustifolia, 64, 74; ambigua, 69; angustiforia, 64; 70, 79; var. canescens, 71; antirrhinoides, 65, 68, 71, 79; arenicola, 75; arguta, 79; Austinae, 70; Bolanderi, 66, 68; var. californica, 68; brevifolia, 72, 73; Brittonii, 66, 71; Bushii, 66, 76, 79; Californica, 68; comprettis, 60; californica, 68; campestris, 69; canescens, 66, 76, 79; canescens, var. punctata, 77; cardiophylla, 66, 73; caroliniana, 74; Churchilliana, 67; cordifolia, 78; var. pilosissima, 78; Drummondii, 66, 73, 79; epilobiifolia, 64, 65, 66, 67, 79, 186, 187, 227; f. albiflora, 67; f. rosea, 67; floridana, 76; Footeana, 72; galericulata, 61, 64, 65, 66, 227; f. albiflora, 67; f. rosea, 67; glabriuscula, 76; gracilis, 70; Helleri, 73; hirsuta, 74; hyssopifolia, 75, 76; incana, 76; integri-Iolia, 70, 76; Incana, 76; Integrifolia, 66, 73, 75, 79; var. brevifolia, 72; var. floridana, 76; var. glabriuscula, 76; var. hispida, 73, 75, 76; var. major, 75; var. multiglandulosa, 76; laevigata, 77; lateriflora, 63, 64, 65, 66, 67, 79; f. albiflora, 68; var. albiflora, 68; f. reconstitutions of the first proposed in the fir 68; f. rhodantha, 68; linearifolia, 70; Mellichampii, 77; Mociniana, 62; montana, 77; nana, 65, 72, 79; nervosa, 61, 64, 65, 69, 70, 71, 73, 79; f. ternata, 70; nevadensis,

71; ovalifolia, 74; parvula, 61, 64, 65, 69, 71, 73, 79; var. ambigua, 69; var. mollis, 69; pilosa, ua, 69; var. mollis, 69; pirosa, 66, 74; var. hirsuta, 74; polymorpha, 75; resinosa, 66, 72, 73 79; var. brevifolia, 72, 73; rugosa, 78, 79; sanhedrensis, 71; saxatilis, 66, 78, 79; var. arguta, 79; serrata, 66, 74, 76, 77, 79; var. montana, 77; siphocampyloides, 71; tuberosa, 66, 68, 79; versicolor, 66, 78, 79; var. bracteata, 78; var. minor, 78; viarum, 68; Wrightii, 72.

Scutellarias, Notes on North American, 61.

Scutellarieae, 62. Scutellarioideae, 62.

Scutellariopsis (sect. Scutellaria),

Scytonema, 161; mirabile, 162; myochrous, 162, 164.

Scytosiphon, 189; lomentarius, 214. Sedge, 186.

Seirospora Griffithsiana, 215. Senecio, 149; aureus, 117, 118, 119, 149; γ borealis, 119; δ discoideus, 117, 118, 119, 120; aureus pauciflorus, 119; Balsamitae, 149; var. pauperculus, 149; var. praelongus, 149; Burkei, 118, 120, 121; discoideus, 117, 118, 119, 120, 121; Fernaldii, 114, 115, 122; idahoenremaidii, 114, 115, 122; idanoensis, 118, 120, 121; indecorus, 116, 117, 118, 119, 120, 121, 122; Jacobaea, 149; Lemberti, 119; lyratus, 113; MacDougalii, 149; obovatus, 117, 149; pauciflorus, 116, 117, 118, 119, 121, 122; pauperculus, 117, 118, 149; resedifolius, 113, 114, 115, 116, 117, 118, 122; yau pauperioris 117, 118, 122; var. columbiensis, 115, 116; var. lyratus, 115; var. multicaulis, 116; Robbinsii, 117; viscosus, 149; vulgaris, 149. Senecios of eastern Quebec and

Newfoundland, Some, 113.

Septoria oenotherae, 219.

Sericocarpus, 150; asteroides, 150; linifolius, 150.

Setaria, 222. Shadbush, 182. Shagbark, 182.

Shaw, M. F., Flora of Penikese Fifty Years after (ecology), 184.

Sherardia, 15; arvensis, 15. Sicyos, 18; angulatus, 18.

Silphium, 150; perfoliatum, 150.

Silybum, 150; marianum, 150. Sisymbrium altissimum, 225; officinale, 225; Thalianum, 199, 232. Sisyrinchium angustifolium, 223;

bermudianum, 223. Sium suave, f. fasciculatum, 48.

Smilax rotundifolia, 223.

Smith, C. P., Pseudotaenidia in Maryland, 23. Solanaceae, 227.

Solanum nigrum, 186, 227.

Solidago, 150, 187; altissima, 150; blidago, 150, 187; altissima, 150; arguta, 150; asperula, 150, 176; bicolor, 150; caesia, 150; var. axillaris, 150; var. paniculata, 150; canadensis, 150, 228; var. Hargeri, 150; Elliottii, 150, 176; graminifolia, 150; var. Nuttallii, 150; humilis, 150; juncea, 151, 228; latifolia, 151; nemoralis, 151, 229; odora, 151; puberula, 151; rigida, 151; rugosa, 151, 186, 229; rigida, 151; rugosa, 151, 186, 229; var. aspera, 151; var. sphagnophila, 151, 176; var. villosa, 151; sempervirens, 151, 185, 186, 229; serotina, 151; var. gigantea, 151; speciosa, 151, 176; squarrosa, 151; suaveolens, 151, 176; × rugosa, 152; tenuifolia, 37, 38, 151; uliginosa, 150; ulmifolia, 151; uniligulata, 151; var. neglecta, 151. Some Changes in Nomenclature, 1.

Sonchus, 166; arvensis, 166, 186, 229; var. glabrescens, 166; asper, 166, 229; oleraceus, 166, 184,

229; f. lacerus, 166.

Spartina, 187, 190; alterniflora, 187, 223; juncea, 223; patens, 186, 223; stricta, var. alterniflora, 223. Spearmint, The Correct Name for,

19, 171.

Specularia, 19, 230; perfoliata, 19. Speculum Veneris, 230, 231. Spergularia marina, 185, 225; rubra,

225; salina, 225.

Spermothamnion Turneri, 215. Sphacelaria, 190; cirrhosa, 214. Sphaerella lacustris, 212.

Sphaerozosma, 204, 210; excavatum, var. subquadratum, 210.

Sphagnum Russowii, 9.

Sphenolobus exsectaeformis, 9; exsectus, 9; Hellerianus, Michauxii, 10; minutus, 10. Spirogyra, 212.

Spirotaenia, 204; condensata, 204. Spirulina tenuissima, 215.

Spondylosium, 210; papillosum, 210; pygmaeum, 210.

Spongomorpha lanosa, var. uncialis,

Sporobolus asper, 175.

Springfield, Mass., Flora of, 179. Spyridia filamentosa, 215.

Stachydeae, 62. Stachyoideae, 62.

Staurastrum, 204, 209, 212; aciculiferum, 209; alternans, 209; Arctiscon, 209; avicula, 209; brevispinum, f. majus, 209; Cerastes, 209; coronulatum, 209; crenulatum, 209; cuspidatum, 209; cyrtocerúm, 209; dejectum, 209; Dickiei, var. circulare, 209; dilatatum, 209; eustephanum, 209; furcigerum, 209; gladiosum, 209; gracile, 209; var. bilbosum, 209; var. cyathiforme, 209; grande, 209; laconiense, 209; leptocladum, 209; maamense, 209; muticum, 209; pilosum, 209; Ophiura, 209; orbiculare, 209; pseudotetracerum, 209; punctu-latum, 209; Sebaldi, 209; spongiosum, 210; tetracerum, 210; tumidum, 210.

Stellaria, 169, 171; graminea, 185, 225; media, 225; pubera, 169, 170, 171; Note on, 169; subsp. homotricha, 171; subsp. silvatica, 170, 171; var. **silvatica**, 171.

Stichococcus bacillaris, 212; flac-

cidus, 212.

Stigonema informe, 164; ocellatum, 164.

Stokey, A. G., Flora of Penikese Fifty Years after (Pteridophyta) 219.

Stout, William, 50, 52, 53, 54, 55. Striatella unipunctata, 193, 218.

Strophostyles angulosa, 176. Study of the Genus Zizania, A, 153.

Subularia aquatica, 38. Succisa, 17; pratensis, 17.

Sumac, 182.

Surirella Mölleriana, 194, 218; recedens, 194, 218.

Svenson, H. K., Notes on some Plants of eastern New York, 221.

Symphoricarpos, 16; albus, var. laevigatus, 16; orbiculatus, 16; racemosus, var. laevigatus, 16. Synechococcus aeruginosus, 162,

164.

Synedra Gaillonii, var. macilenta, 194, 218; Hennedevana, 193, 218. Systosiphon lomentarius, 191.

Tabellaria fenestrata, 194, 218. Taenidia, 23; integerrima, 23. Tanacetum, 166; vulgare, 166; var. crispum, 166.

Taraxacum, 166, 218; Dens-leonis, 229; erythrospermum, 167; laevigatum, 167; officinale, 167, 229; var. palustre, 167; vulgare, 167.

Taylor, W. R., Flora of Penikese Fifty Years after (marine algae), 212; Further Notes on British

Columbia Algae, 160. Tetmemorus, 206; Brebissonii, 206. Teucrium canadense, var. littorale,

Thelypteris, 230; Boottii, 177; cristata × marginalis, 50; simulata, 50, 177.

Thuja, 12, 13. Tolypothrix lanata, 162, 164; penicillata, 164.

Tragopogon, 126, 167; Dandelion, 126; lanatum, 126; porrifolius, 167; pratensis, 167; virginicum, 126.

Trentepohlia aurea, 165.

Tribonema bombycina tenuis, 166; bombycinum, 211; utriculosum, 211.

Trichocolea tomentella, 11.

Tridens flavus, 220.

Trifolium agrarium, 186, 226; arvense, 186, 226; pratense, 186, 226; repens, 186, 226.

Trigonium alternans, 194, 218. Triosteum, 16; aurantiacum, 16; perfoliatum, 16, 176.

Triploceras, 206; gracile, 206. Triticum repens, 222.

Tropidoneis Lepidoptera, 193, 195,

Troximon, 126, 127; ciliatum, 127; Dandelion, 126; glaucum, 126, 127; gracilens, 125; lanatum, 126, 127; virginicum, 126, 127.

Tussilago, 167; Farfara, 167. Two Additions to the Flora of Rhode Island, 220; more Woolwaste Plants from Westford,

Mass., 38.

Typha, 186; angustifolia, 1; var. elongata, 1; var. longispicata, 1; var. virginica, 1; latifolia, 187, 219; latifolia, var. elongata, 1.

Typhaceae, 219.

Ulva, 190; Lactuca, 213. Umbelliferae, 93, 227. Uromyces trifolii, 219. Utricularia resupinata, 180. Uva Ursi, 231.

Valeriana, 17; officinalis, 17. Valerianaceae, 17.

Vaucheria longipes, 165; sessilis,

DECEMBER

Verbascum phlomoides, 39; thapsiforme, 39; Thapsus, 39, 186, 227. Verbesina, 167; encelioides, var. exauriculata, 167. Vernonia, 167; fasciculata, 167;

noveboracensis, 167.

Viburnum, 16; acerifolium, 16; alnifolium, 16; cassinoides, 16; dentatum, 16; Lentago, 17; Opulus, 17; var. americanum, 17

Vicia Cracca, 226; tetrasperma, 226. Viola fimbriatula, 226; sagittata,

Violaceae, 226. Vitaceae, 226. Vitis-idaea, 231. Vitis idea, 231.

Weatherby, C. A., Another Davenport Fern Herbarium, 49; A new Satureja from Florida, 80; A Note on Stellaria pubera Michx., 169; Two more Wool-waste Plants

from Westford, Mass., 38.
Westford, Mass., Two more Woolwaste Plants from, 38.
West Virginia, Erucastrum Pol-

lichii in, 22. Wiegand, K. M., Some Changes in Nomenclature, 1.

Wild tobacco, 39.

Willis, Lena, Annual Field Meeting of the Josselyn Botanical Society, 112. Willows, 187.

Woodwardia areolata, 177; virginica, 177.

Wool-waste Plants from Westford, Mass., Two more, 38.

Xanthidium, 208; antilopaeum, 208; var. minneapoliense, 208; var.

polymazum, 208; cristatum, 208. Xanthium, 167, 229; ambrosioides, 167; canadense, 167; chinense, 167; commune, 167; echinatum,

167; italicum, 167; pennsylvanicum, 167; spinosum, 168; strumarium, 168; Wootoni, 168. Xyris caroliniana, 37; flexuosa, 180.

Zizania, 153, 154, 155; A Study of the Genus, 153; aquatica, 153, 154, 155, 156, 157, 158, 159; var. angustifolia, 156, 157; var. brevis, 156, 157; var. interior, 156, 158; var. latifolia, 159; aristata, 159; bonariensis, 159; ciliata, 159;

elavulosa, 156; dahurica, 158; effusa, 156; fluitans, 159; latifolia, 156, 158, 159; lenticularis, 159; microstachya, 159; miliacea, 159; natans, 159; nutans, 159; palustris, 153, 154, 155, 156, 157, 158, 159; Retzii, 159; subtilis, 159; terrestris, 159.

Zizaniopsis bonarieniis, 159; mictianiopsis bonarieniis, 159; mictianiopsi bonarieniis,

rostachya, 159; miliacea, 159. Zostera marina, 219. Zygnema, 161, 212.





DUPLICATE BOOKS FOR SALE.	
Baillon, H. Dictionaire de Botanique. Colored plates. Many text-figures. 4 vols. 4° Paris. 1876–92. Shelf-worn; binding of 1 vol. loose.	\$18.00
Bicknell, C. Flowering Plants and Ferns of the Riviera and neighboring Mountains. 8° Col- ored plates. London, 1885. Binding loose	\$5.00
Bigelow, J. American Medical Botany. Many colored plates. 3 vols. bound in 2. 8° Boston, 1817–20	\$17.00
Sullivant, W. S. Icones Muscorum, 8vo., illustrated by numerous copper plates of high excellence (unbound and in sheets). Here offered	
at a greatly reduced price	\$6.00 \$5.00 \$10.00
Watson, S. Bibliographical Index to N. A. Botany. Part I (all published). Washington. 1878. 8°	\$1.25
Address Librarian, GRAY HERBARIUM of HARVARD UNIVERSITY, Cambridge, Mass	

ALL ABOUT THE WILDFLOWERS

THE AMERICAN BOTANIST is devoted entirely to our native plants. Color, fragrance, nectar, pollination, seed dispersal, edible and poisonous plants, drugs, dyes, soaps, fibers and hundreds of other subjects discussed. A series of "Plant Names and Their Meanings" nowrunning. Twenty-six volumes published

Quarterly, 40 pages, \$1.50 a year; sample, 25 cents. 50-cent coupon with each sample.

WILLARD N. CLUTE & CO.

JOLIET. ILL.

INDICATORS FOR DETERMINING REACTIONS OF SOILS

As used by Dr. Edgar T. Wherry in the studies described on page 35 of the March issue of 1920. A set of six indicators, made up ready for use, in box suitable for carrying into the field. Accompanied by instructions for using them. Price \$2.85. For sale by: LaMotte Chemical Products Co., 13 W. Saratoga St., Baltimore, Md.

FIELD AND HERBARIUM EQUIPMENT

HAND LENSES COLLECTING CASES
FERN TROWELS MOUNTING PAPERS
FIELD PICKS HERBARIUM CASES

PLANT PRESSES GENUS COVERS FELT DRIERS

Write for free Catalog R-91

CAMBRIDGE BOTANICAL SUPPLY CO., Waverley, Mass.